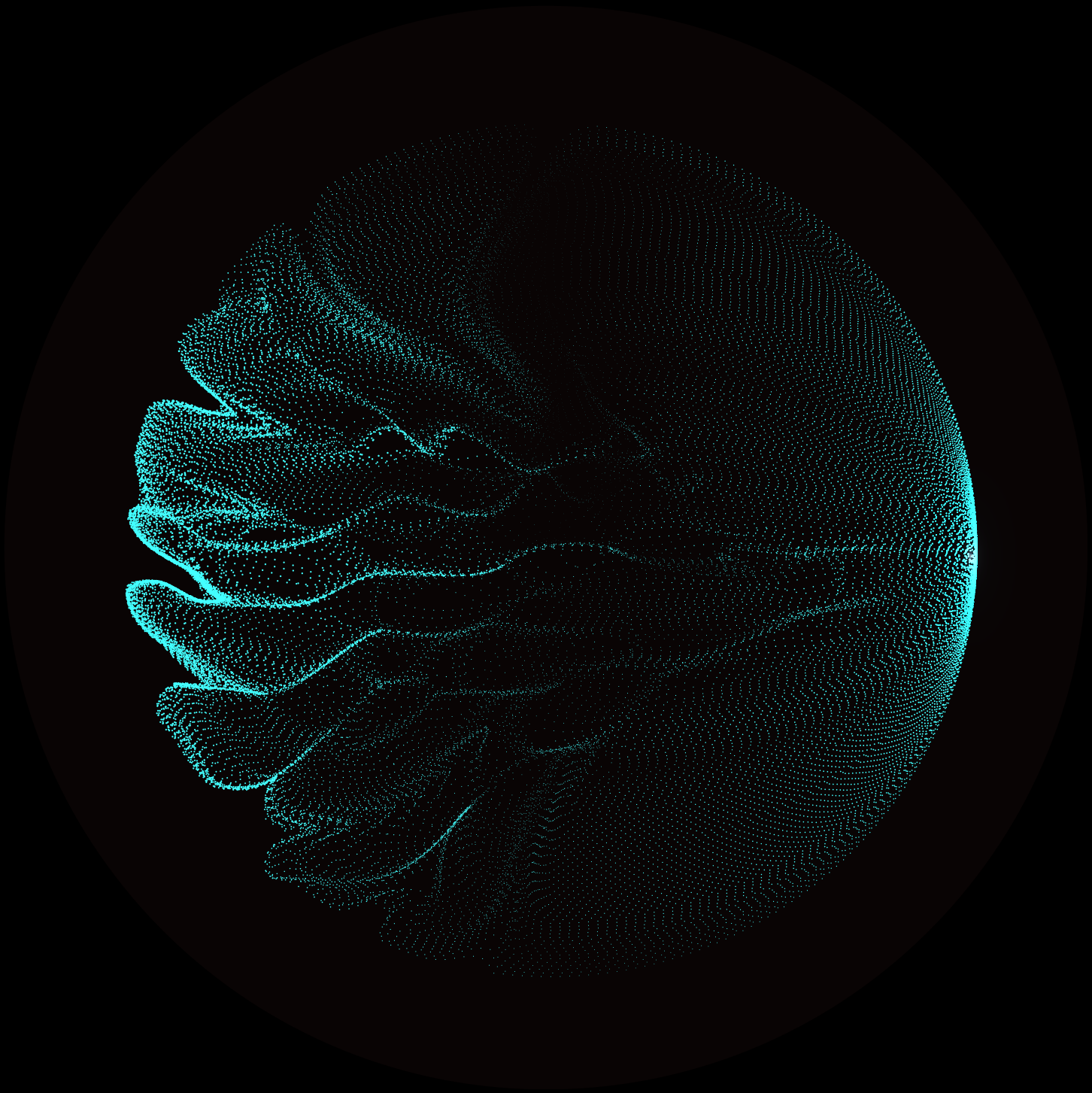
Deloitte.



Deloitte CMS Pro

Upgrade to an enhanced case management platform to deliver end-to-end control

Outreach and repapering workflow for Brexit and beyond

Contents

Discover more about Deloitte CMS Pro, including video tutorials, at:
Deloitte.co.uk/CMSPro

An overview

Deloitte CMS Pro is a mature application for use on any financial services project that needs a robust **case management** or **workflow tool**. It is a highly configurable system that can be deployed in a variety of environments for a variety of different projects.

Deloitte CMS Pro brings you control.

Secure

During development, common security vulnerabilities such as HTML, JavaScript and SQL injection and cross-site scripting were taken into consideration and defended against as standard. This has been tested on multiple occasions by penetration testing teams from different organisations, both for internally deployed and cloud based versions of CMS Pro. All tests have been passed successfully.

The latest technology

As a web-based application, all you need to access CMS Pro is an internet browser – there is no need to install anything on your computer. Modern web technologies provide a simple and device-responsive user interface.

Highly configurable and quick to set-up

One of the core concepts behind CMS Pro is that for each project it is used on, we simply reconfigure the system rather than recode it – each screen or piece of functionality is a separate module and can be enabled/disabled and configured as applicable.

As a result, the vast majority of the base development work is already done before we even start work on an individual project, so we can focus on the specific requirements of each project and deliver in a shorter timeframe (fully featured versions of the system have been set up in under four weeks).

Tried, tested and scalable

Used by many of Deloitte's largest clients and with over 1,000 users to date, the system works at scale, both in terms of user and data volume. Use cases have ranged from a handful of users on one dedicated site to a 24/7 operation with peaks of just under 700 users using the system to generate over 100,000 system interactions per day on more than 80,000 cases.

CMS Pro works at scale, both in terms of users and data volumes.

Continually evolving

When improvements are made to CMS Pro for a specific project, these are fed back into the base version of the system and then form part of future versions of CMS Pro. This means that the core product is continually improving.

Deploy anywhere, access anywhere

CMS Pro can be deployed anywhere, as long as you have a web server and a database server. It does not require anything to be installed on the end user's computer or device, other than a modern web browser.

CMS Pro has been deployed internally within Deloitte, on client infrastructure, and in the cloud using Amazon Web Services. Whitelisting ensures that only permitted IP addresses or ranges can access the site, and this has allowed people to work on the same project, using the same case management system, on multiple continents.

Module summary

The core modules contained within CMS Pro are listed below. This is not an exhaustive list of every module that has been present in every deployment and further information, including credentials and system demonstrations, can be provided on request.

A typical deployment of CMS Pro will contain the majority of these modules, but most can be switched off if they are not required. Furthermore, new modules can be created by using existing module templates, speeding up the development process whilst also delivering the specific needs of an individual project.

Key client outreach and repapering modules

Dashboard
View all the cases and headline stats at a glance when you first login

Document management
Can be used to scan or import new documents into the system

Robotics
Allows most repeatable processes to be automated assigning specific business rules

Contact
Record details of outbound and inbound contact points (time/date), including telephone conversations

Management information
A full suite of automated MI can be made available directly from the system and is configurable to meet your needs

Status driven workflow
Let users follow a defined process when updating statuses, ensuring all steps are completed in turn

Mass email campaigns
Create bulk outreach campaigns to be sent from your domain. Read, validate and store client responses

Integration to other platforms
Track changes made to various aspects of each case, such as status or review outcome

Audit history
Track changes made to various aspects of each case, such as status or review outcome

Permissions
User and role based permissions restrict users – Deloitte and client – to only the cases and tasks they need to see and do

Additional modules

Allocation
Allowing quick and effective allocation of cases or tasks to agents on the project

Logging
Data entry screens to capture new information and new cases

Review
Complete a checklist of questions in order to arrive at an overall decision relevant to each case

Redress
Record details of any redress payments or activities due to a customer

Diary
Add actions that need to be completed in order to finalise a case

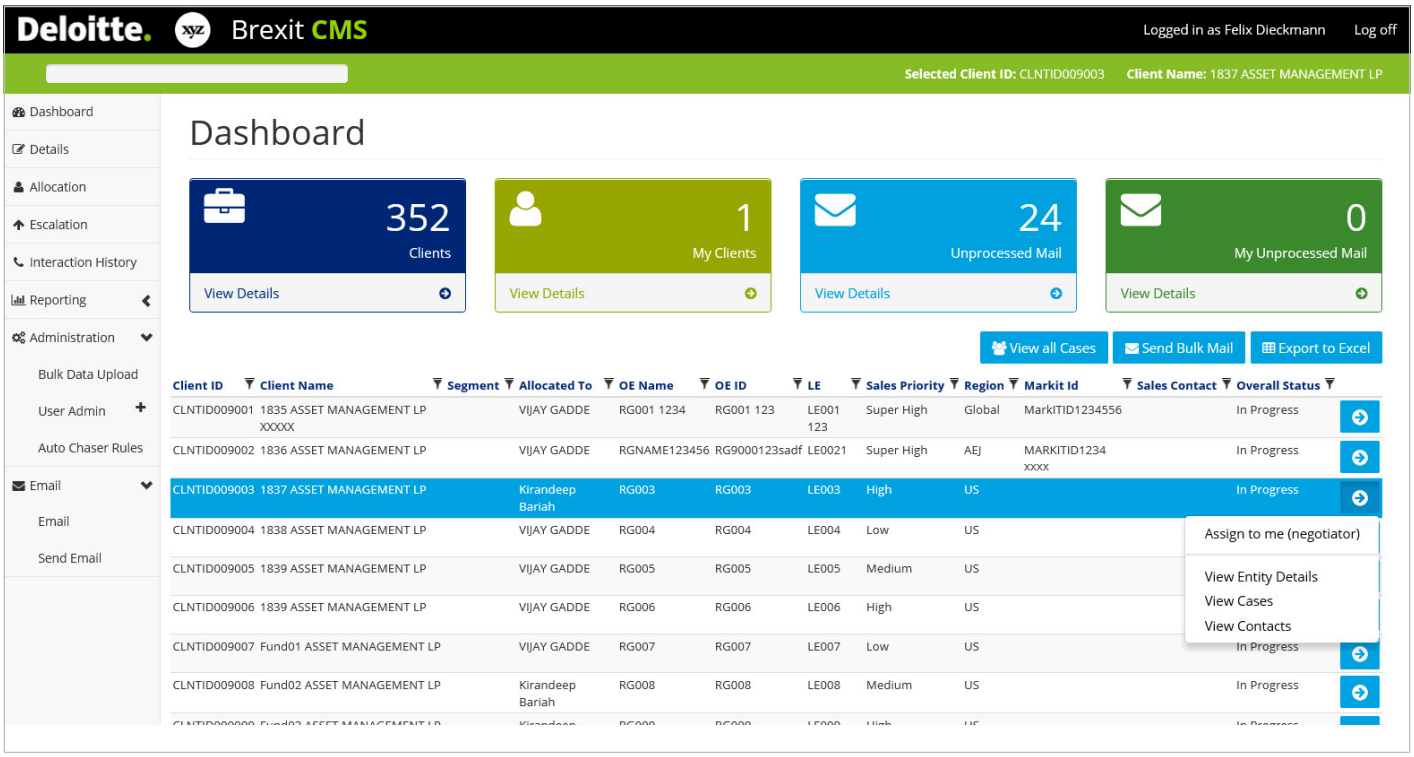
Data gathering
Record details of all outgoing requests for information necessary to complete the case

Quality
Fully integrated quality assurance module allowing real time quality assurance

User management
Add new users, update existing users and organise people into teams

Module details

Dashboard



Overview

The configurable Dashboard module is the first screen that a user sees once they have logged into CMS Pro. The screen is made up of two components: icons at the top, and the grid at the bottom.

Each icon in the top half of the screen represents a pot of cases that the user can look at – this may be role dependant, so while a case handler may only see the cases allocated to them, a team leader might see all cases within the system. Typically each pot would be the cases in their WIP (work in progress), either in their entirety or filtered by a specific criteria (for example, cases in their WIP which have an unprocessed email). Each icon displays the total number of cases in that pot, and clicking on it will populate the grid below with the relevant cases.

The grid below lists all the cases in the relevant pot. This grid is sortable and filterable, meaning that a user can quickly get to the cases they need to look at. The grid is also exportable to Excel, should more complex processing be required.

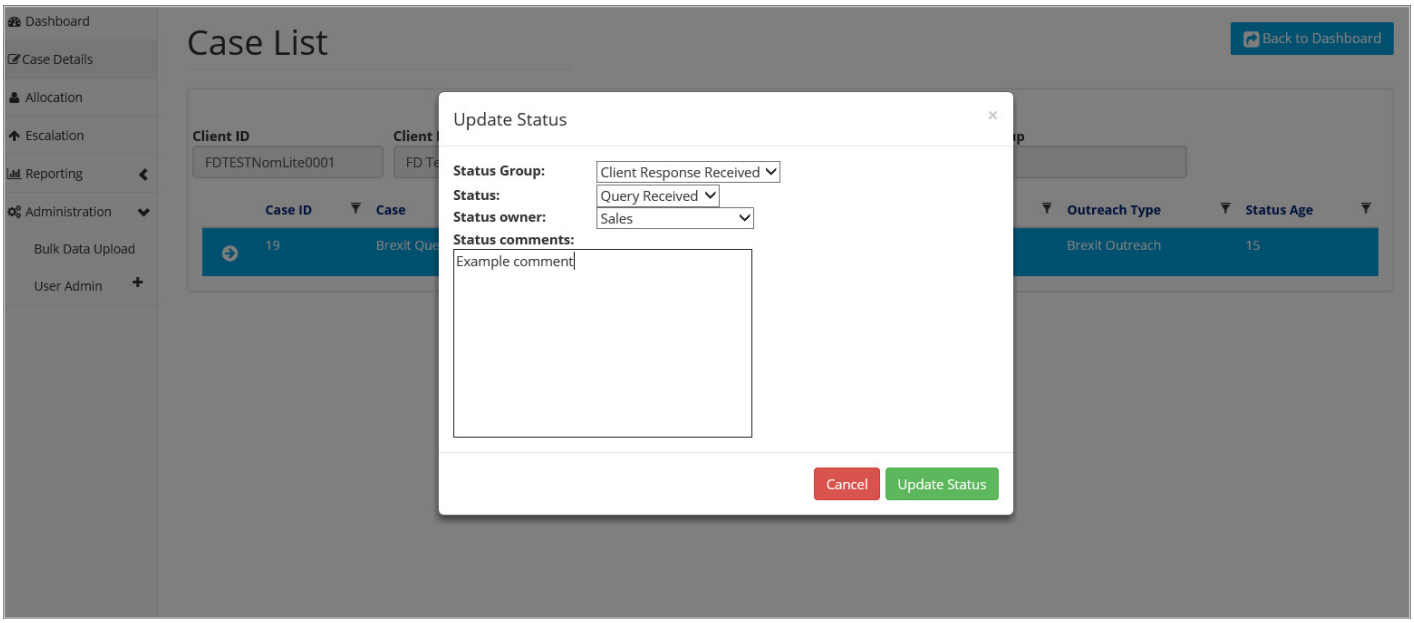
Quick actions

For each case, there is a Quick Actions button, which allows the user to perform an action on the case without the need to move to another screen. In the above example, view cases (documents) is one of the options available, but other systems have had various quick actions made available, including:

- Add a new diary action or a vulnerability flag to the case
- Mark the case as "on hold"
- Allocate the case to me

The functionality contained within the Quick Actions button can be customised as necessary – if there is a task that a user is likely to perform on a regular basis, it may make sense to allow them to perform it more easily via the Quick Actions button.

Status driven workflow



Overview

Each case in a workflow system will typically have a status, which indicates what is happening to the case and where it is in the overall workflow, and CMS Pro is no different in this respect. However, rather than using hard coded status logic, or leaving the decision as to where a case goes to next entirely to the user, CMS Pro uses dynamic, table driven status logic to power its workflow.

For example, a user may want to update the status of a case that they have completed some work on. To do this, they would either click the Next button present on most screens or use the Quick Actions button on the Dashboard screen to select the Change Status option.

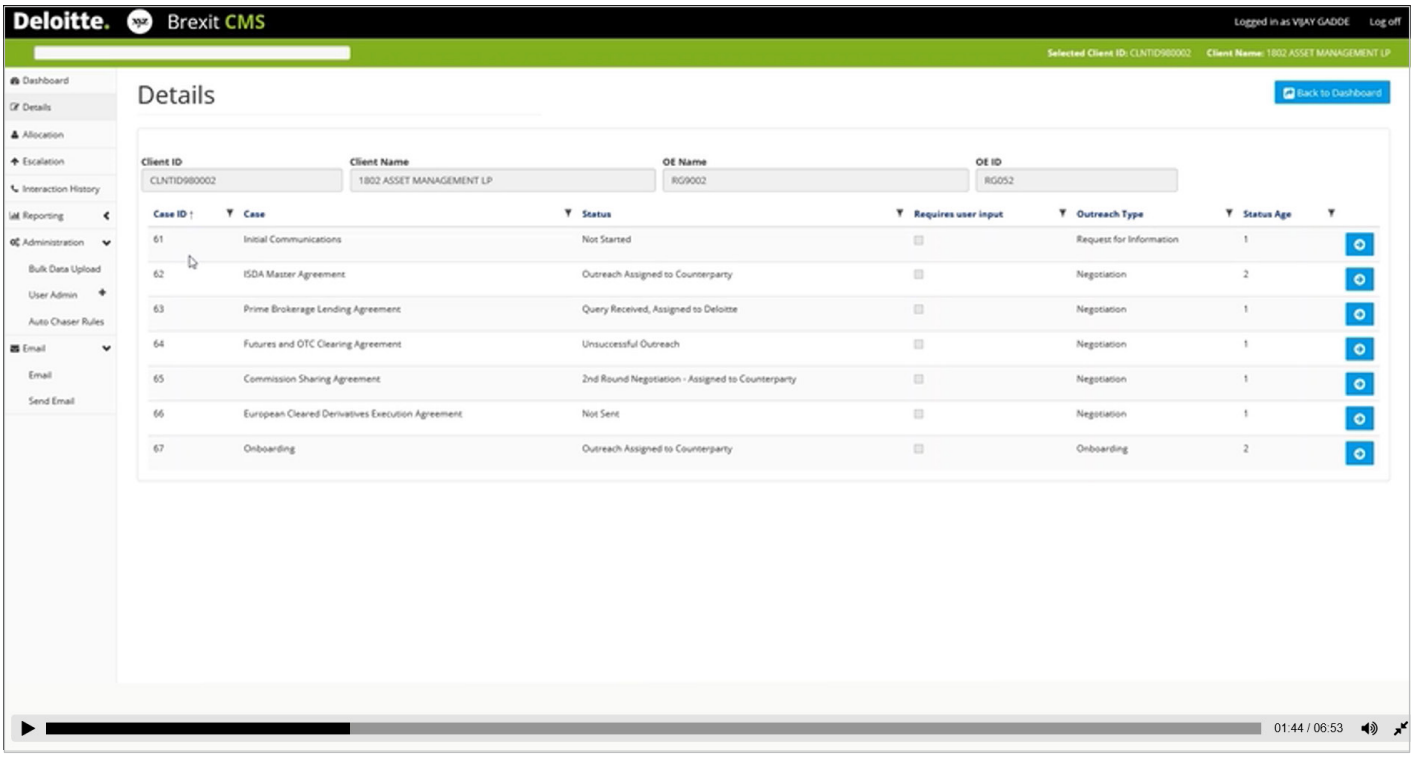
- Once this is selected, CMS Pro looks at:
- The user's current role(s)
- The current status of the case
- A specific data point within the system, perhaps if a client has replied to the request of information
- Any other criteria that is required, such as whether the case has outstanding diary actions or is marked as on hold

Using this information it determines the valid next steps that are available and presents them to the user to select the correct one, as per the above screenshot. The user then selects the correct option, adds any comments they need to, and clicks Save to make the status change. The advantages of such a system include:

- It prevents users from using statuses that they should not be able to access
- It prevents users from making illogical status moves, for example from 'Client Response Received' to 'Not Yet Started'
- As it is table driven, the logic can be quickly updated in the back end SQL tables and is then instantly live for all users, rather than requiring a developer to code new logic into the system and release a new version

If required sub statuses and status owners can be configured.

Document management



Overview

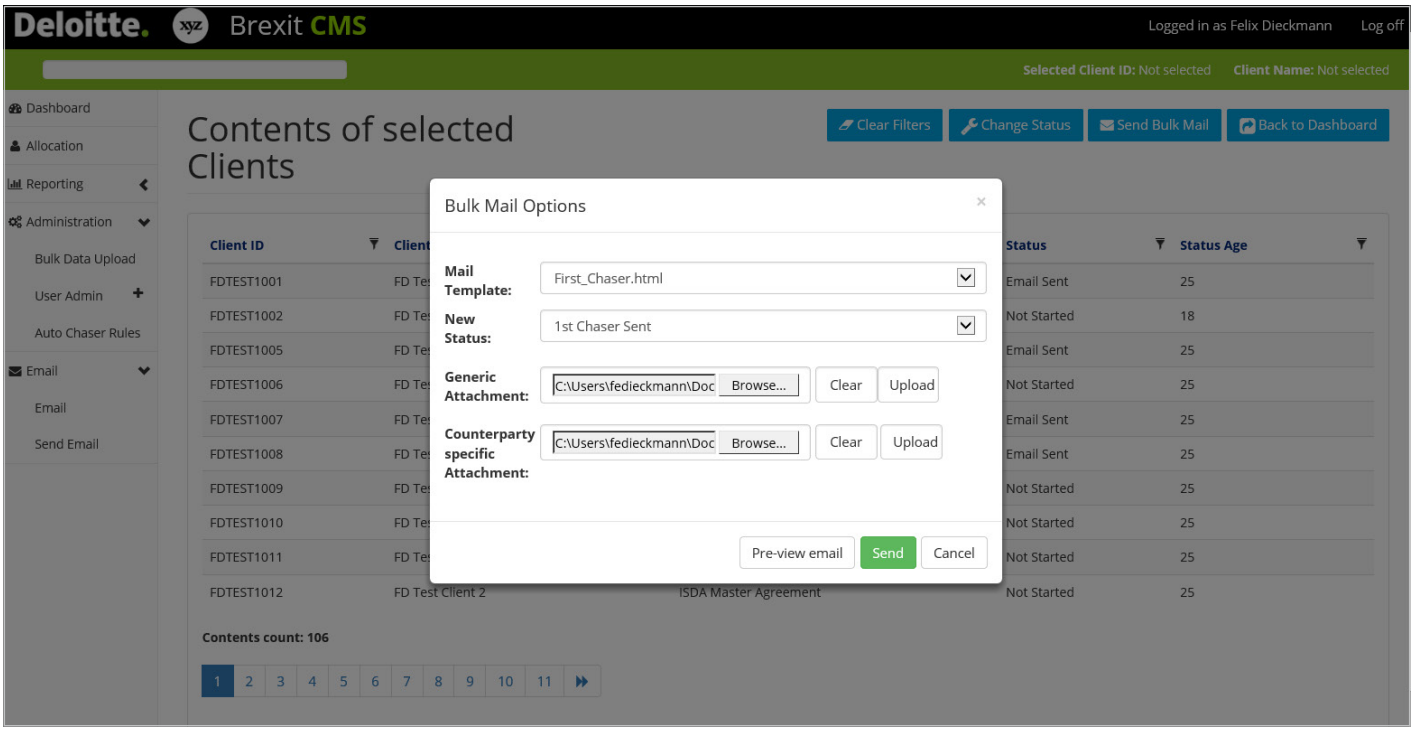
CMS Pro supports the tracking of multiple cases per client allowing you to understand to status of each document. This feature can also be used to support future outreaches allowing you to add additional cases to an existing client, whilst maintaining the history of previous contacts and negotiations.

The range of complexity for re-documentation can vary according to client type and documentation type. Some cases only require positive affirmation, some will require information to be gathered and other might require a complex negotiation. CMS Pro can cover all scenarios.

This view shows all the document types associated with a single client. The cannel of interaction is shown along side the current status.

CMS Pro supports the tracking of multiple cases per client allowing you to understand to status of each document.

Mass email



Overview

Bulk outreach campaigns can be created allowing you to distribute emails on mass from your domain. Campaigns can be tailored on demand by applying filters to the client details, document details and status. For example, a campaign might specifically target clients with and ISDA master agreement who have previously been contacted but not yet responded.

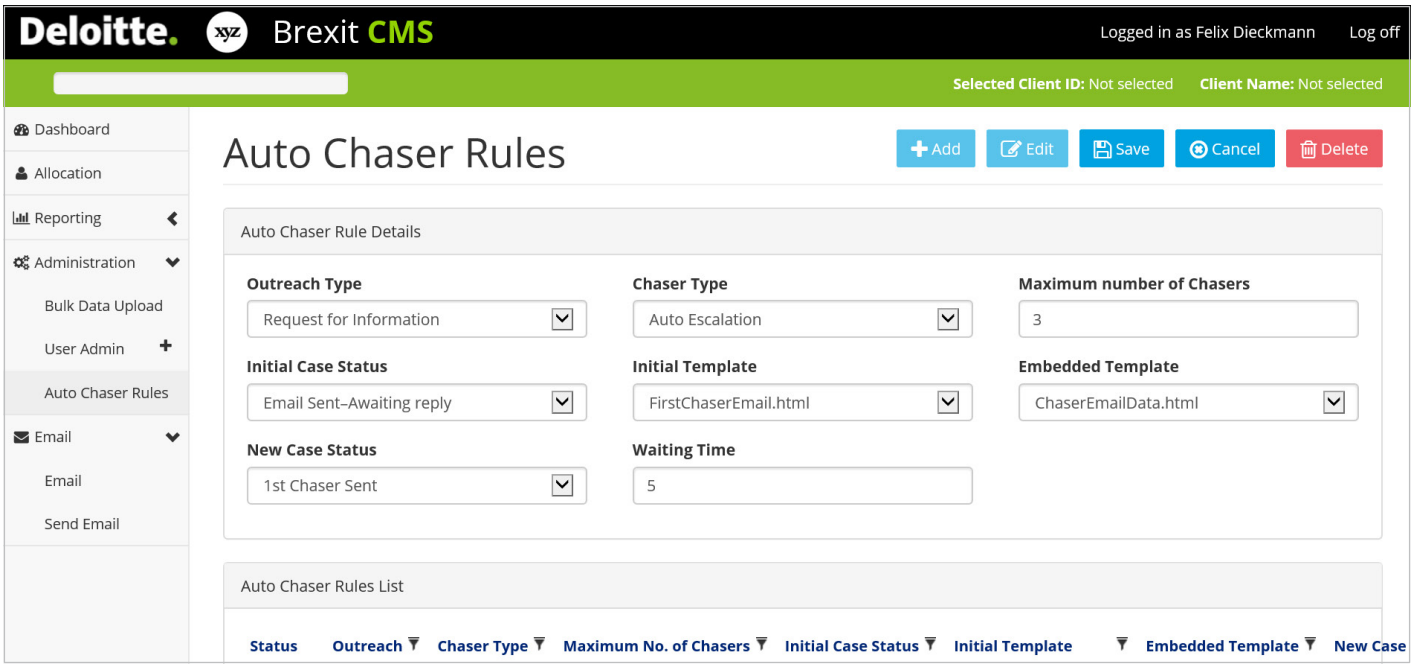
The user can select specific email templates for the campaign and has the option to add a generic attachment such as FAQs, or client specific attachments such as the client's updated ISDA Master Agreement.

Once the email is sent the status is automatically updated in CMS. The new status can be customised by the user for each campaign. In this example CMS changes the status to '1st Chaser Sent'.

Emails are stored at cased/document level to ensure all interactions are tracked under a single view.

Once the client replies to the email it is captured within CMS Pro. The status is automatically updated in CMS to reflect that the action is no longer with the client.

Robotics



Overview

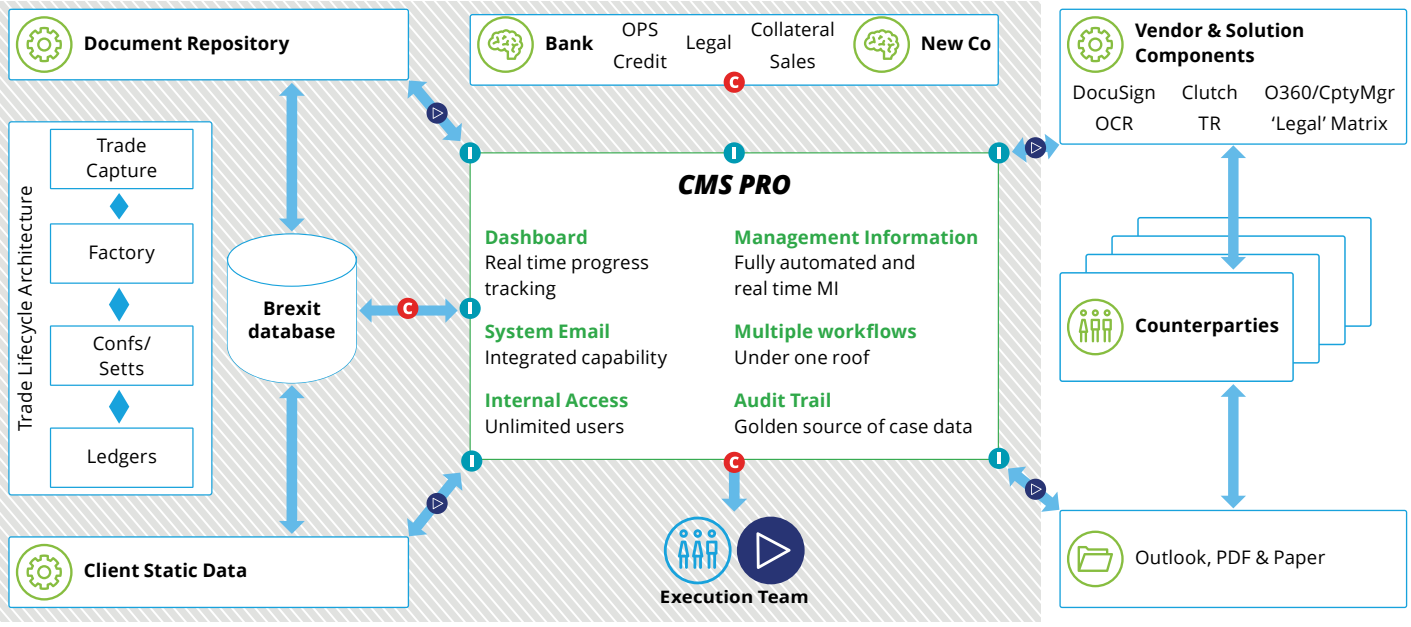
Most repeatable processes can be automated by assigning specific business rules, resulting in more efficient and accurate status tracking, faster response times and savings on headcount costs. CMS Pro is automatically preloaded with the following Robots:

- Invalid Email addresses. The solution automatically recognises invalid emails and bounce-backs. The application will automatically disable to contact and report back to improve data quality. It will check if any active contacts remain. If not it will update the status to reflect an unsuccessful outreach and raise an escalation.

- Validate and store client response. Where no further action is required the application can be configured to reply to the client via email and close the case. Where the businesses rules require human intervention such as a negotiation the case status is updated to reflect that action is no longer with the client.

- Auto Chase Rules. CMS Pro can be configured to automatically case unresponsive counterparties in accordance with your timeframes. CMS will chase in line with your business rules using your email templates which are configurable to an ever changing environment. Chasers can also be switched off for specific clients or groups of client in the event that they are deemed unhelpful.

Integration to other platforms



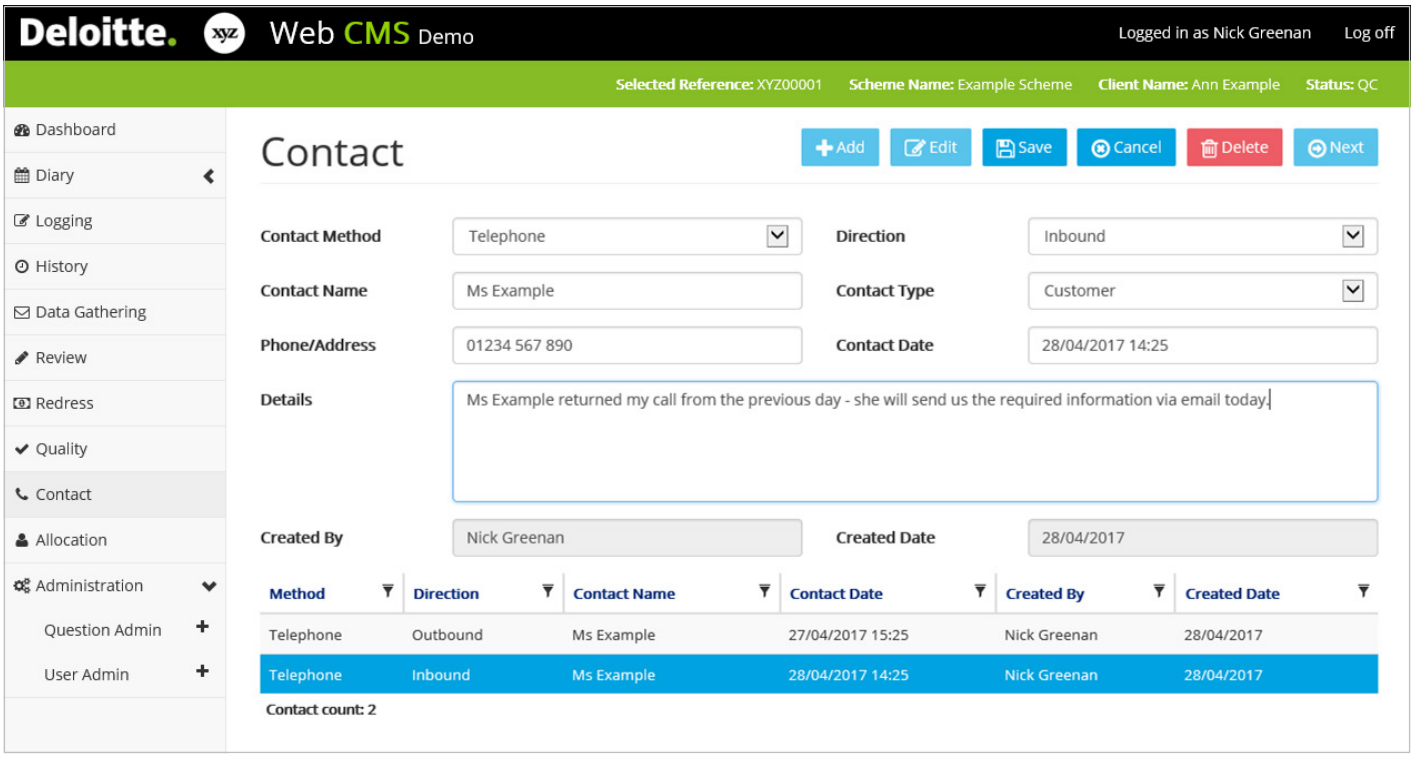
Overview

There are many components involved in re-documentation. These may include:

- Internal systems such as Document Repositories and Client Static Databases
- Third party tools such as document generators or shared platforms
- Execution team handling outreach and negotiation
- Banks internal teams who will be involved through out the process such as Ops, Legal, Credit and Sales
- Clients

CMS Pro integrates all of these things bringing control to the end to end process and ensuring there is a single source of truth through the repapering journey.

Contact

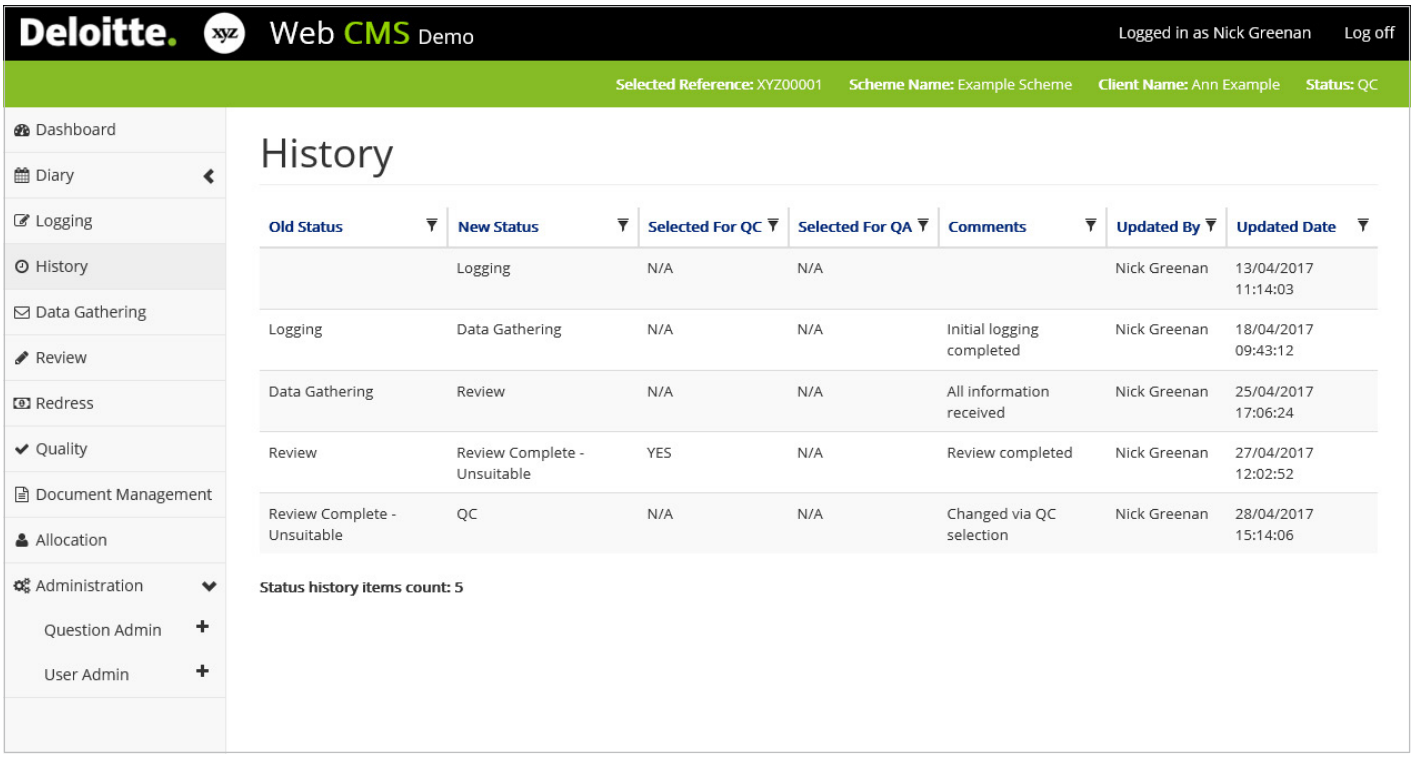


Overview

The Contact module is typically used in implementations of CMS Pro where customer or other third party contact is a major part of the process. This module allows the user to add details of each telephone call they make or receive, each email, fax or letter they send or receive, or even just add a file note to the case. For instance, a customer may only be able to answer phone calls after a certain time, or may prefer that all contact is via email or may want all letters to be sent to them using a larger font size. In this scenario, you could add a file note to the case via the Contact screen, which would make this information available to all users within the system.

As per the Document Management and Data Gathering modules, metadata for each contact item added to CMS Pro can be configured for each implementation. For example, for an outbound telephone call, it may be necessary to record the telephone number that was used, the time of the call, the name of the person spoken to, confirmation that identity and verification (ID&V) checks had been completed along with detailed notes of the conversation; alternatively a brief note and a date and time might suffice.

Audit history



Old Status	New Status	Selected For QC	Selected For QA	Comments	Updated By	Updated Date
	Logging	N/A	N/A		Nick Greenan	13/04/2017 11:14:03
Logging	Data Gathering	N/A	N/A	Initial logging completed	Nick Greenan	18/04/2017 09:43:12
Data Gathering	Review	N/A	N/A	All information received	Nick Greenan	25/04/2017 17:06:24
Review	Review Complete - Unsuitable	YES	N/A	Review completed	Nick Greenan	27/04/2017 12:02:52
Review Complete - Unsuitable	QC	N/A	N/A	Changed via QC selection	Nick Greenan	28/04/2017 15:14:06

Overview

Throughout CMS Pro, audit trails are maintained to record what information has changed, who changed it, what they changed it from/to and when it was changed. There are two different types of audit history built up by CMS Pro: generic and specific.

Generic audit trail

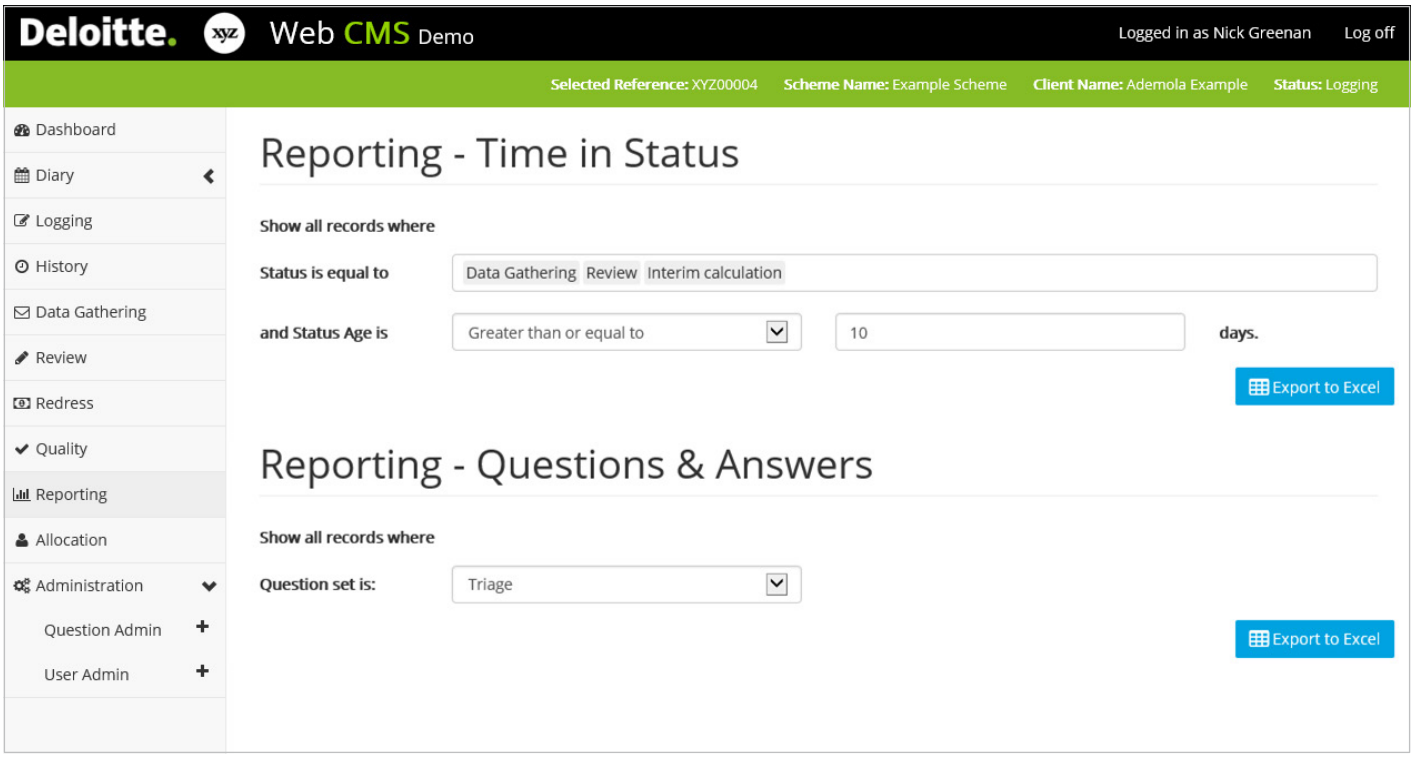
Every single table in CMS Pro's back end SQL database has a trigger which is fired whenever data is added, updated or removed. When such an action occurs, data about the change, such as the table name, the column name, the old and new values, the date and time of the change and the user who made the change, will be logged to one big generic Audit table. This means that if you needed to work out who had changed a particular value on a particular case, you could interrogate this table to obtain the data you require.

Specific audit trail

Some parts of CMS Pro also build up their own audit trail where appropriate. For example, the main case table contains some timestamps such as Status Last Updated or Last Updated Date, which are typically viewable on the Log-in screen.

A more detailed example would be the status history. When changing status, CMS Pro also offers the user the opportunity to provide a comment as to why the status change has been made, so this needs to be recorded along with the actual status transition itself. Furthermore, a particular status change may lead to the case being made available for a potential quality check, so CMS Pro should record whether the case was sampled or not following the status transition. This information is all recorded in a dedicated status audit history table, and is viewable via the History module in CMS Pro, as can be seen above.

Management information



Overview

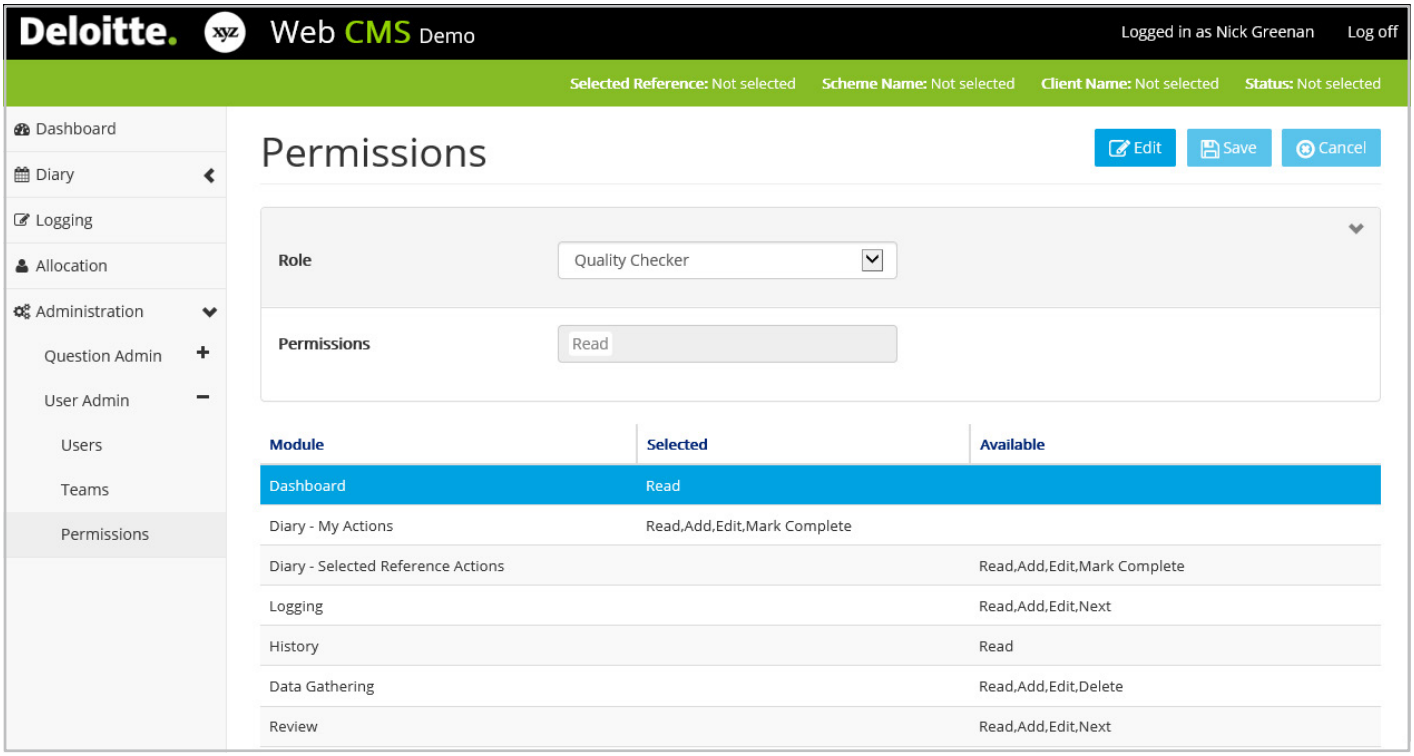
CMS Pro is not only capable of holding as much data about a case, a document, a telephone call or a task as necessary, but also records all changes made to any of these data points. A wealth of management information can therefore be produced by the system, either directly within the website or using the SQL database that sits behind it. While the reporting requirements will typically vary from project to project, examples of management information produced using CMS Pro includes:

- Dedicated screens within CMS Pro which allow users to provide parameters, such as specific statuses and age parameters for the above example, which can then run a report and export the results to Excel.

- QlikView dashboards that connect directly to the SQL database and allow the user to view data, either live or a cut from a specific time, in a more graphical form that can then be further analysed within QlikView.

Emails that either include attached reports, embed aggregated data in tabular or paragraph form, or both, that can be sent out automatically according to a schedule, or generated on demand Excel spreadsheets that connect to the SQL database and provide a live, refreshable link to CMS Pro's data – this can then be used as either a data source for other reports, used to generate pivot tables or charts, or other ad hoc reporting requirements.

Permissions



Overview

Each user has an account set up for them via the User Management module to access CMS Pro. The role that a user has been given will determine which modules they can and cannot see, and if they can see a module what they can do in the module. For example:

- A standard case handler should not be able to perform quality checks, but you may want them to have read only access to the Quality module so they can see the details of any checks carried out on their cases.
- Some users may need to complete the checklist in the Review module, but few should be able to edit the checklist itself.
- A dedicated Log-in team might be set up to add new cases to CMS Pro, and as such they should have the ability to add new cases on the Log-in screen; others may not need this access, but may need the ability to amend the details that were added, while a third group may not be able to access the Log-in screen at all.

In CMS Pro, each module has a defined set of permissions that can be performed on it. For instance, the above example shows that the Log-in screen has four permissions: Read, Add, Edit and Next. Each role can then be granted any combination of these permissions on this screen.

This will then determine whether the screen is visible, and if it is the relevant buttons, options or other controls will be made available to the user to carry out these tasks.

As well as being used to enable buttons, controls or entire modules, permissions are also checked whenever an action is carried out within CMS Pro. For example, a user may not have access to the Review screen, but may know the URL for the page.If they enter the URL manually, CMS Pro will check whether they have access before presenting the screen, and can then display an error page indicating that they do not have the required permissions to view that page, perform that actions etc., or can redirect them to the home page.

Permissions can be changed for each role via the User Admin module.

Contacts

To find out more about Deloitte CMS Pro, please contact a member of the Deloitte Managed Services Brexit team to book a demo or discuss your requirements in more detail.

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